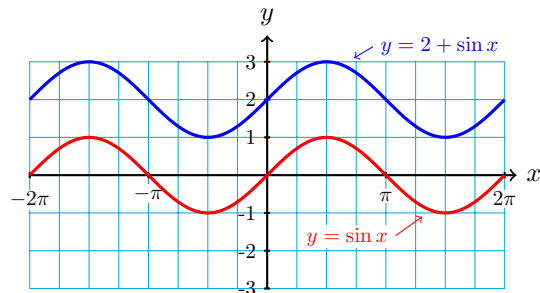# Play with TikZ

Just Us

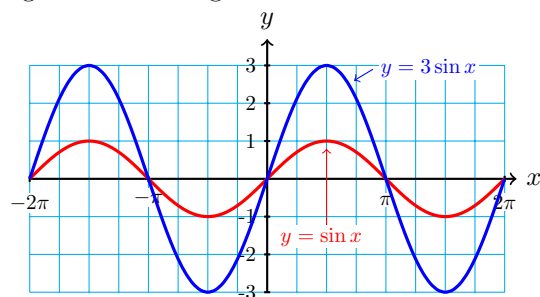### December 12, 2018

1 Section 7.2
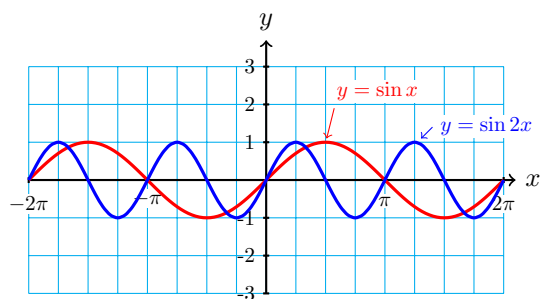
fig-7-2-sina transformations of sine

A vertical shift
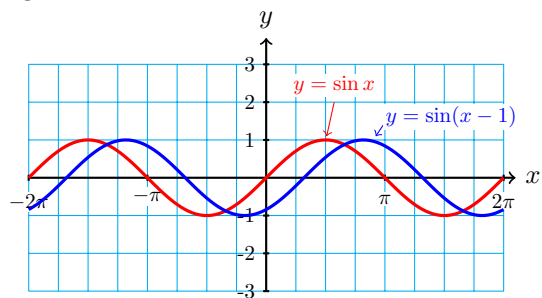
fig-7-2-sinb scaling of sine

A vertical stretch

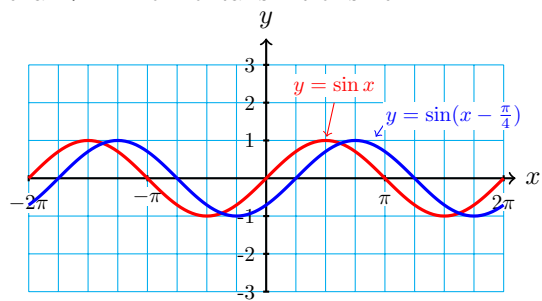fig-7-2-sinc horizontal compression of sine

A horizontal compression
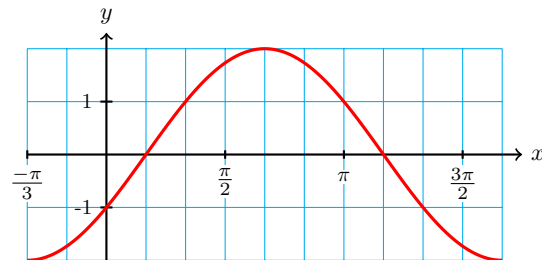
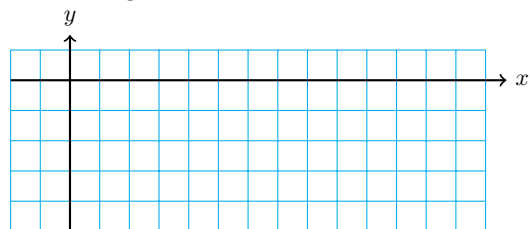fig-7-2-sind horizontal shift of sine

A horizontal shift

exam7-2-1 horizontal shift of sine

exam7-2-2 transformation of sine
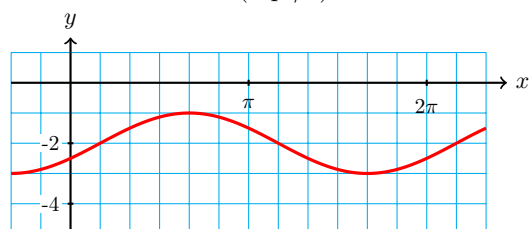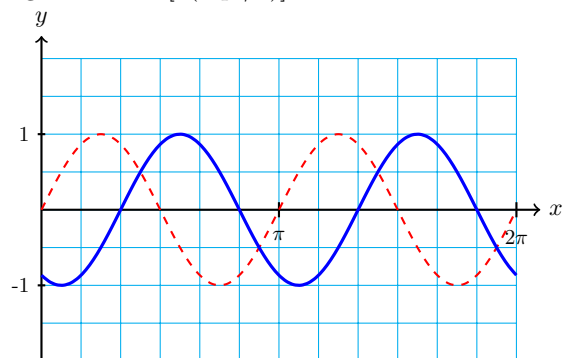

2

exer7-2-2 grid

exer7-2-2ans -2+sin(x-pi/6)

fig-7-2-cta sin[2(x-pi/3)]

$$f(x) = \sin\left[2\left(x - \frac{\pi}{3}\right)\right]$$

fig-7-2-ctb sin[2x-pi/3]

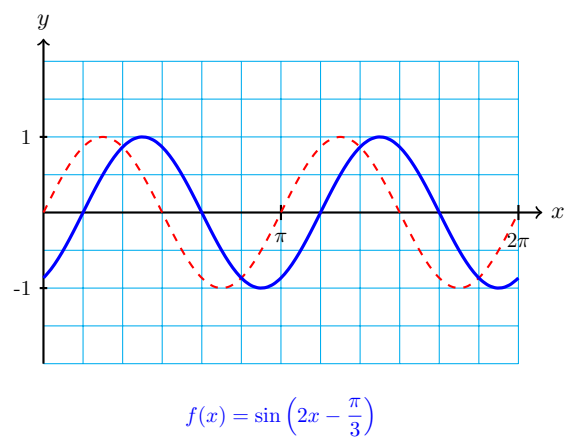$$f(x) = \sin\left(2x - \frac{\pi}{3}\right)$$
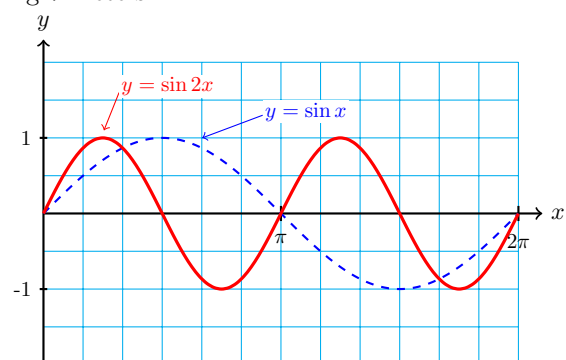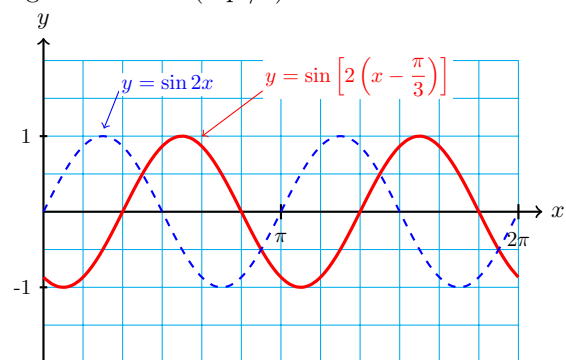
fig-7-2-ctc sin 2x

$y = \sin 2x$

$y = \sin x$

a. Step 1

fig-7-2-ctd sin 2(x-pi/3)

$y = \sin 2x$

$y = \sin\left[2\left(x - \frac{\pi}{3}\right)\right]$

b. Step 2

4

fig-7-2-cte sin (x - pi/3)

$y = \sin x$

$y = \sin\left(x - \dfrac{\pi}{3}\right)$

a. Step 1

fig-7-2-ctd sin 2(x-pi/3)

$y = \sin\left(2x - \dfrac{\pi}{3}\right)$

$y = \sin\left(x - \dfrac{\pi}{3}\right)$
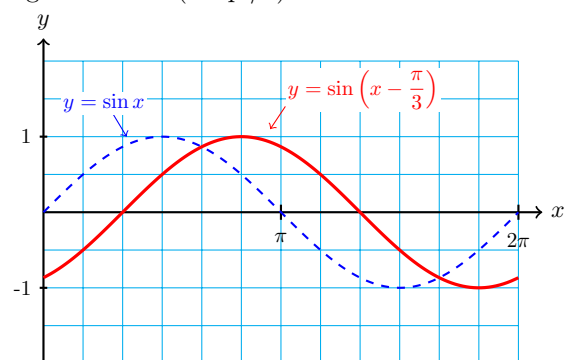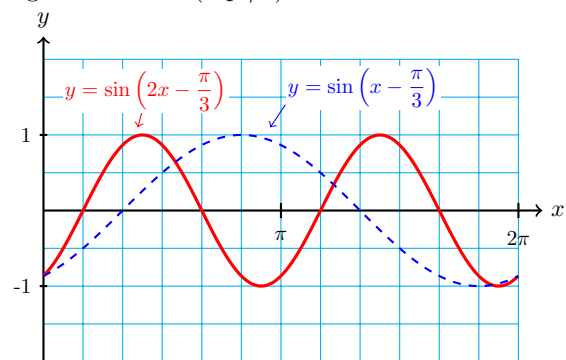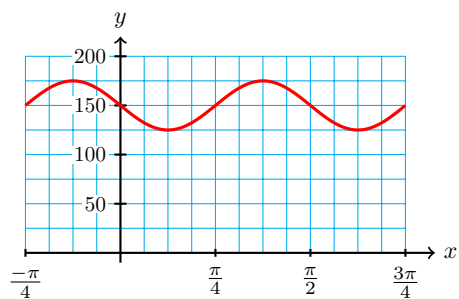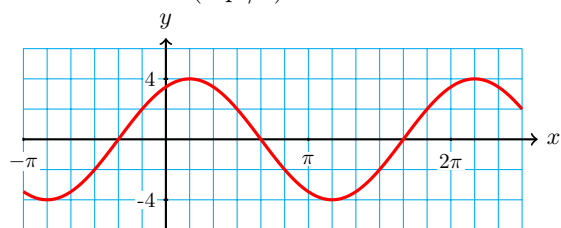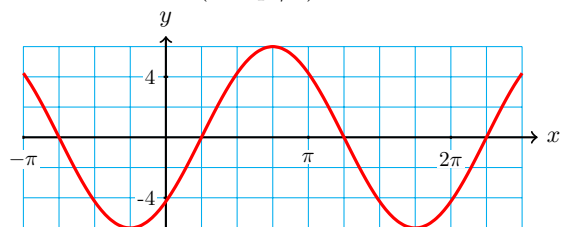
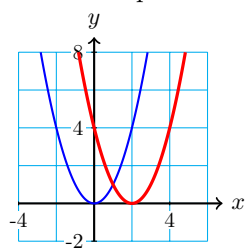b. Step 2

exam7-2-3 4cos3(x+pi/3)-2

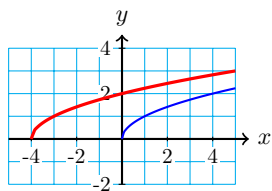exer7-2-3ans 150-25 cos(4x-pi/2)

5

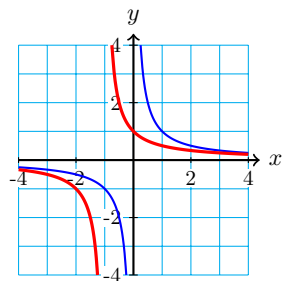exam7-2-4 4 cos(x-pi/6)
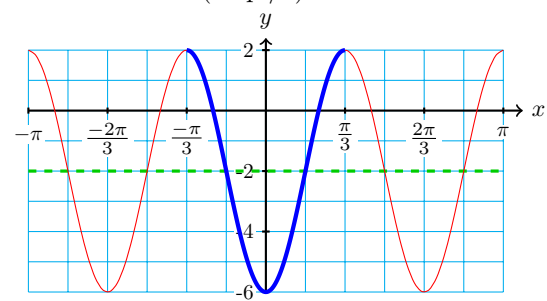
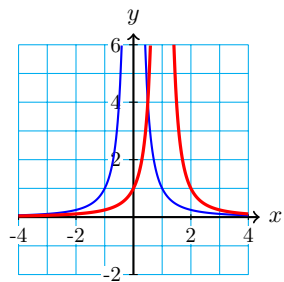exer7-2-4 4 6 sin(x - pi/4)

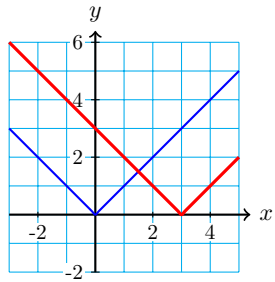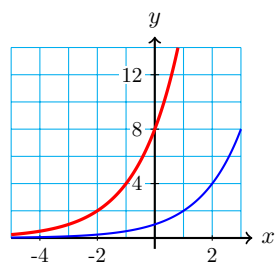ar7-2-1ans parabolas

ar7-2-2ans square roots

ar7-2-3ans reciprocals
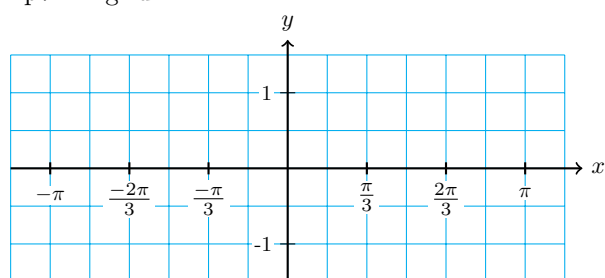

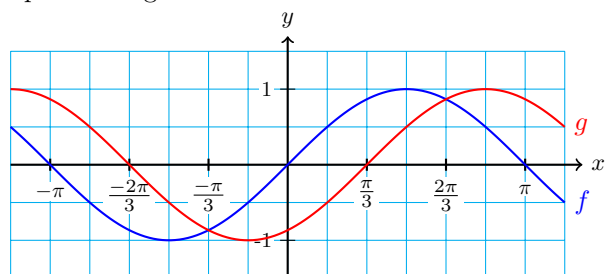ar7-2-4ans inverse squares

ar7-2-5ans absolute values

ar7-2-6ans absolute values
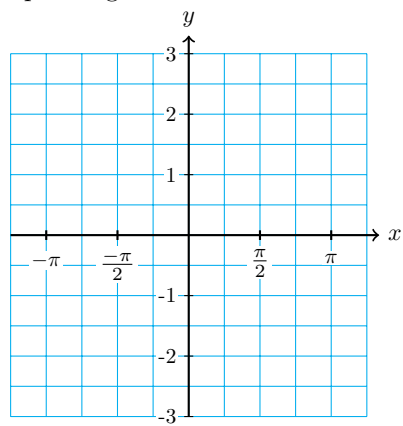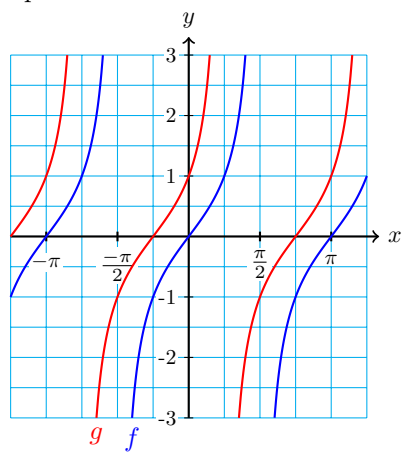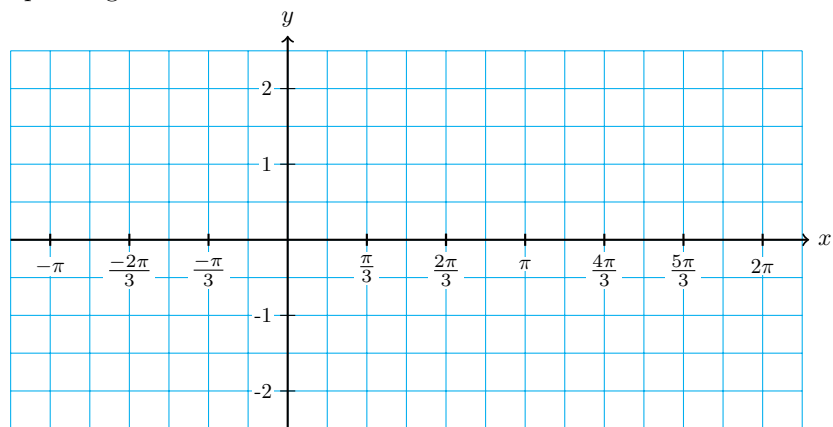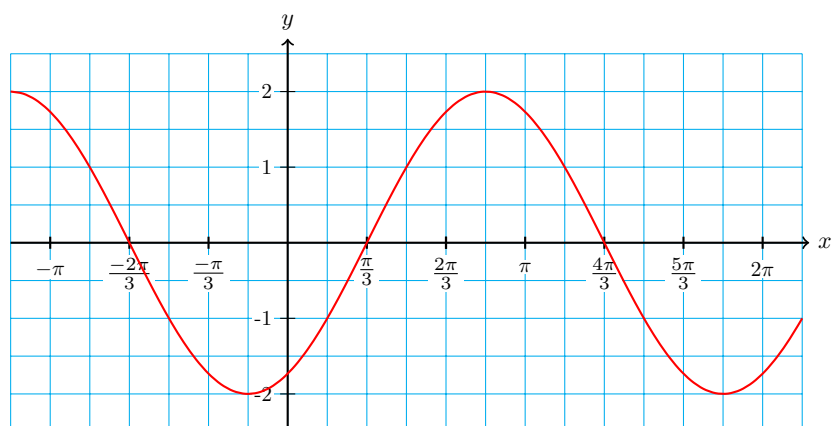
hp7-2-1 grid

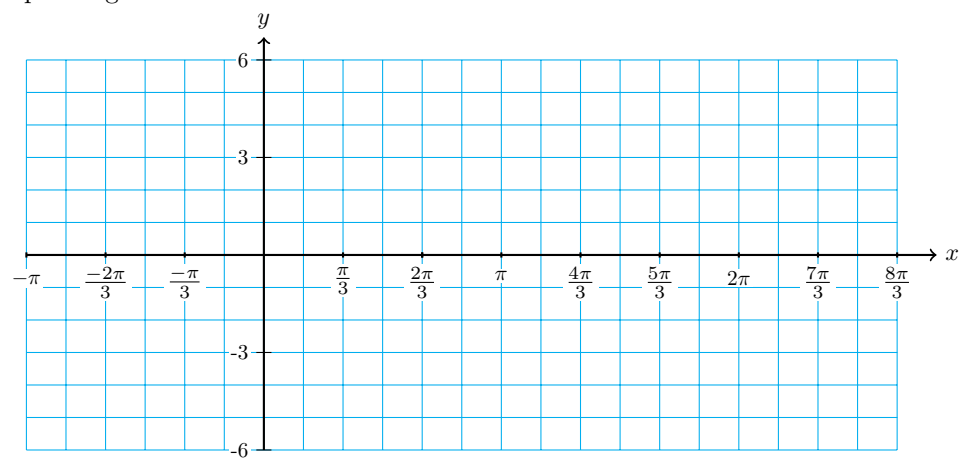hp7-2-1ans grid
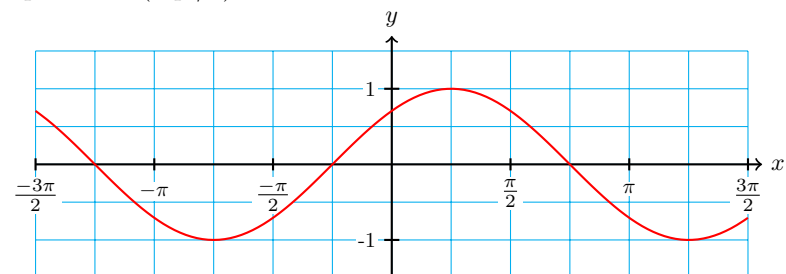

hp7-2-3 grid

8

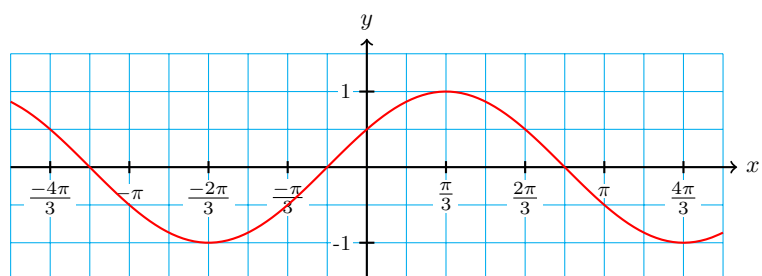hp7-2-3ans translated tan
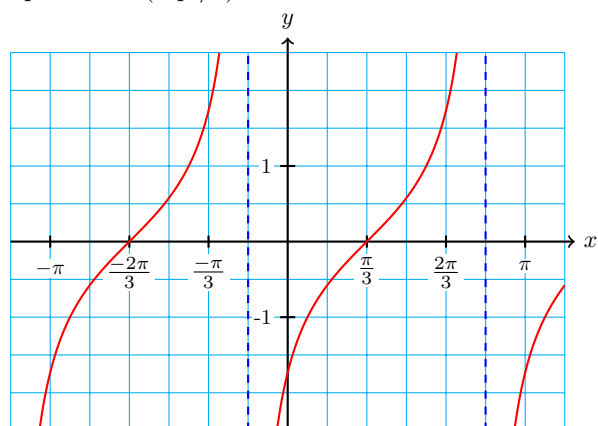

hp7-2-5 grid

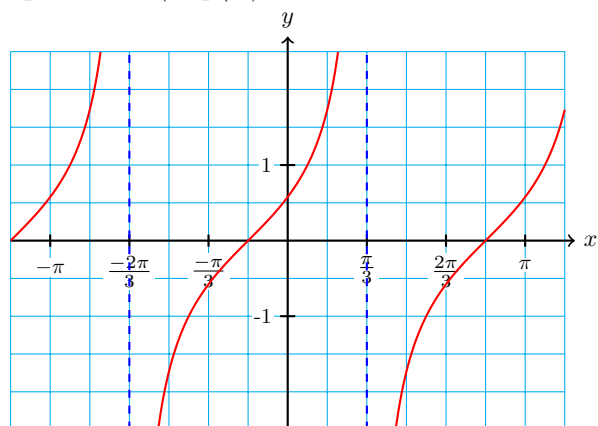

hp7-2-5ans -2 cos(x + pi/6)
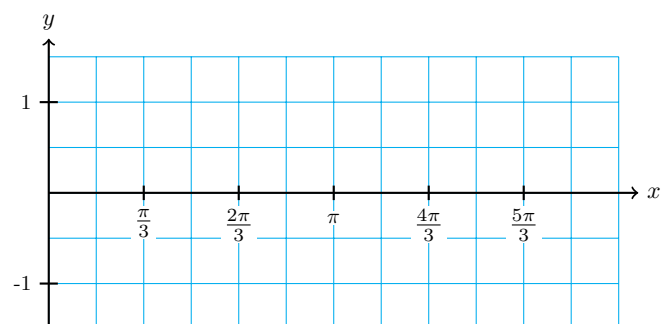
hp7-2-6 grid

hp7-2-7 cos(x-pi/4)

hp7-2-8 cos(x-pi/3)

hp7-2-9 tan(x-pi/3)

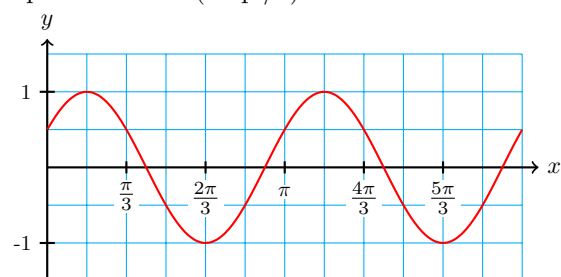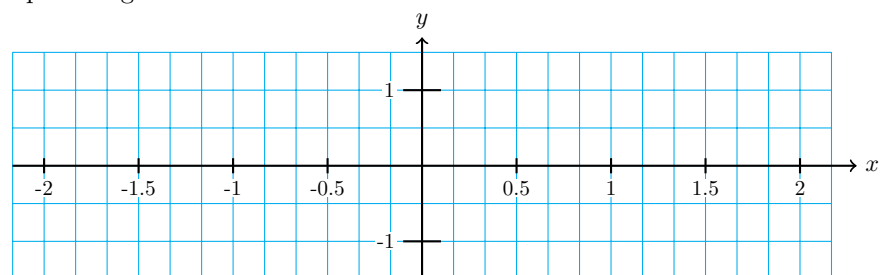hp7-2-10 tan(x+pi/6)

hp7-2-11 grid

11
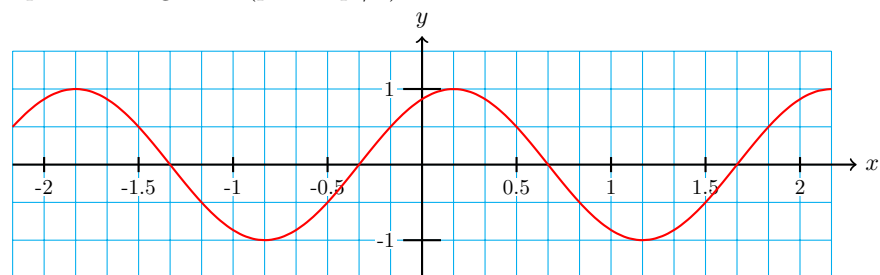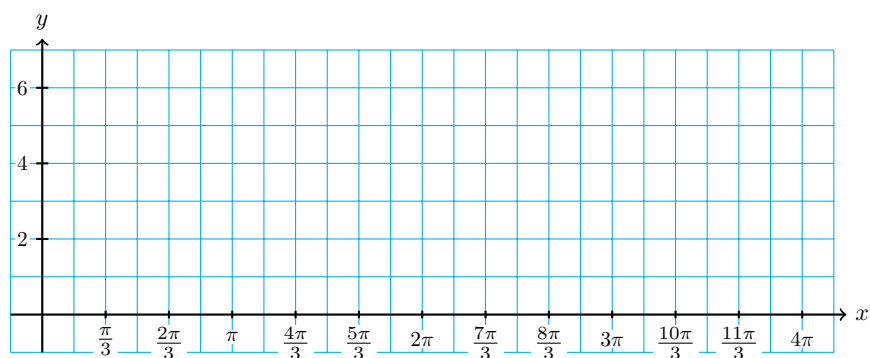
hp7-2-11ans cos(2x-pi/3)

hp7-2-13 grid
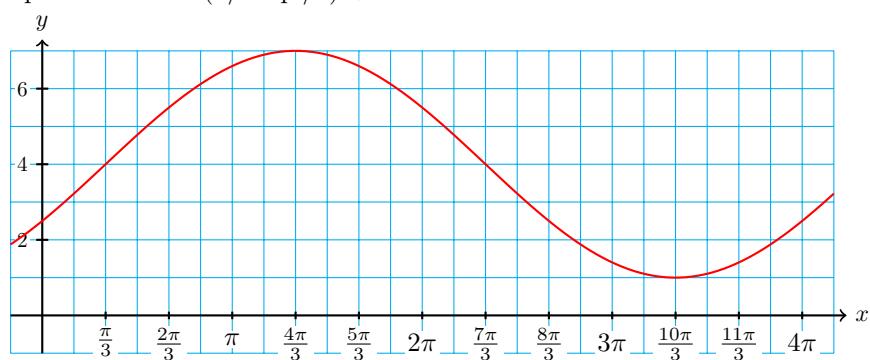

hp7-2-13ans grid sin(pi x + pi/3)

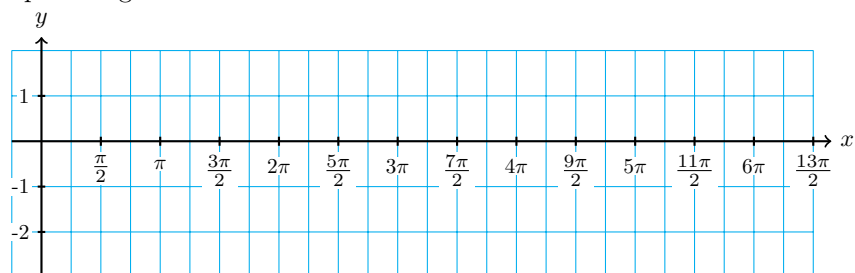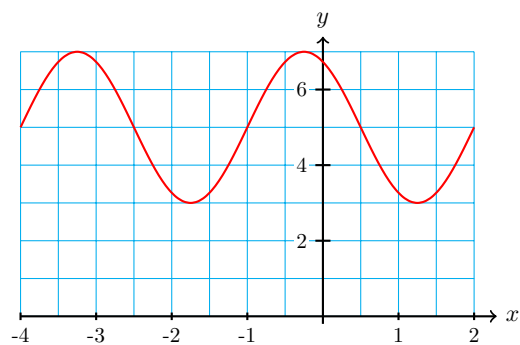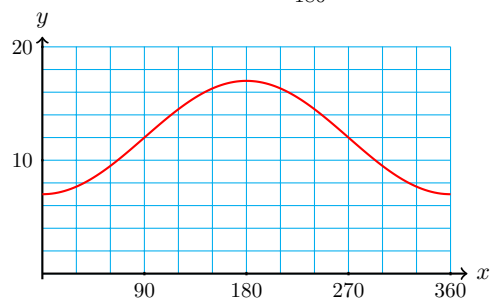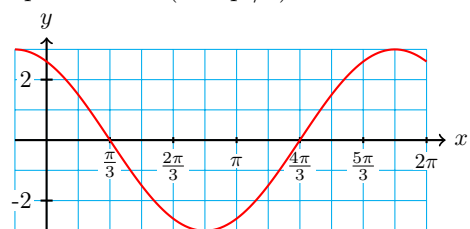
hp7-2-15 grid

hp7-2-15ans 3sin(x/2 - pi/6) + 4
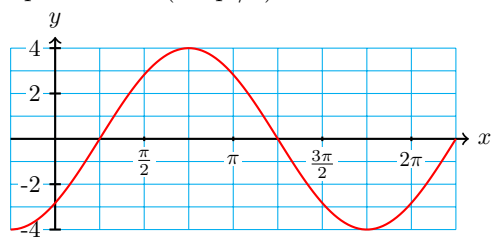

hp7-2-16 grid

hp7-2-17ans 2 sin(2pi/ (x + 4))+5

13

hp7-2-19ans $y = -5\cos(\frac{\pi x}{180}) + 12$

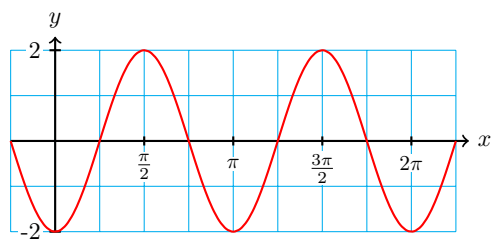
hp7-2-21 3cos(x + pi/6)
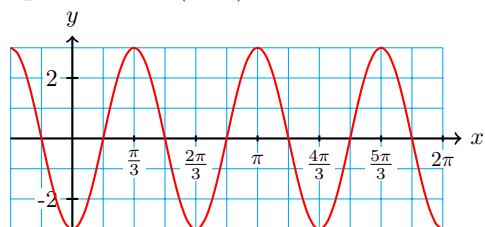

hp7-2-22 4sin(x - pi/4)

hp7-2-23 -2cos(2x)

hp7-2-24 -3cos(3x 6)
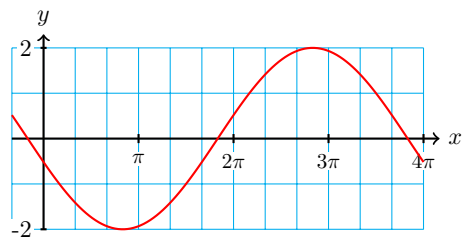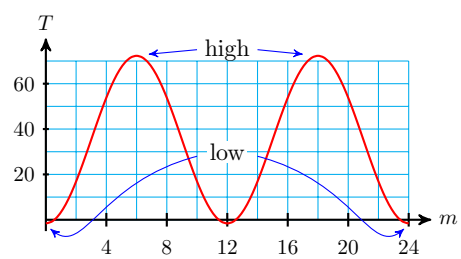

hp7-2-25 -4cos(1/4 (x - pi/3))
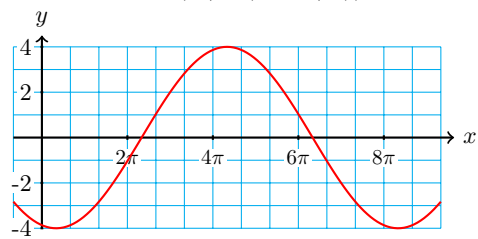
hp7-2-26 -2sin(.5(x+pi/6))

hp7-2-27ans $-36.95\cos(\frac{\pi}{6}m) + 35.35$

hp7-2-29ans $h(t) = 1.4 - 1.4\cos(0.51t)$